

MONEY-SAVING FACTS ABOUT ENSILAGE

and the 3-Way

GEHL

**MAKES
GRASS
SILAGE**

**CHOPS
HAY**

**FILLS
SILO**



THE STORY OF A *Great Ensilage Cutter*

● It is not strange that one of America's great silo fillers should be built in America's great dairy state—Wisconsin. But the fact that more Gehl Silo Fillers are used in Wisconsin than any other make, and that the Gehl, throughout many years, has won fame from Coast to Coast, is a tribute to its fine performance.

For more than seventy years, since the building of the first "Cutting Benches," this plant has been actively engaged in building fodder and ensilage cutters. After the "cutting bench" came the elevator type, and then the blower type with cylinder cut, and finally the Gehl Disc Type Cutter of today, with its tough boiler-plate steel fly-wheel, autotype transmission and low speed with big capacity.

BIG CAPACITY AT LOW SPEED

The Gehl Ensilage Cutter represents the development of many years of practical experience. In the hands of thousands of farmers and in numerous official tests over a long period of years, the Gehl Ensilage Cutter has proved its ability to throw more ensilage with less power than the many other cutters with which it has been in competition. Many letters from satisfied users, as well as recent Agricultural College tests are recorded in this book as proof.

Knowing these things, you must at least admit that the Gehl deserves your most earnest consideration and comparison before you choose an ensilage cutter. In order to judge fairly, you should know all about how the Gehl is built and why it is built that way. You will find the answer to these questions on the following pages.



the 3-WAY GEHL ensilage cutter

1. MAKES GRASS SILAGE

2. CHOPS HAY

3. FILLS SILO

For years the silo has demonstrated its value as the cheapest and most effective way of preserving the corn crop as green summer feed for winter use. Once introduced, only a few years passed before nearly all of the hundreds of thousands of dairy farms throughout the nation were equipped with them.

Now comes two new methods of handling hay. Methods that represent the first major improvements in the handling of that important crop; *chopping hay into the mow* and making *grass silage*. Any method that will reduce the hazard connected with the curing of hay, or preserve it as a near approach to summer pasture for winter use, is worth looking into. Both

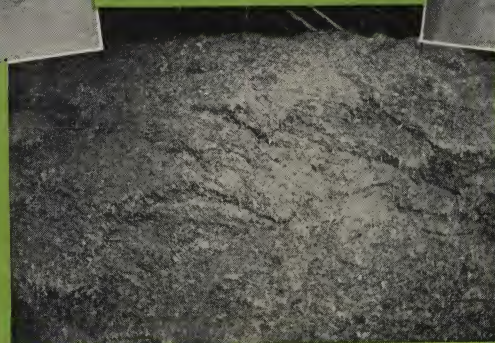
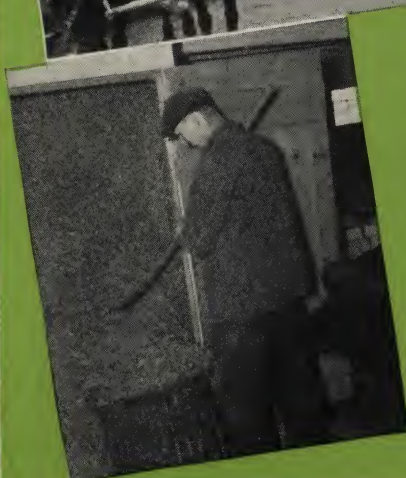
of these methods have undergone thorough tests by agricultural experiment stations and in actual use. Both bear the endorsement of the college scientists and have proved practical on thousands of farms.

The practice of chopping dry hay into the mow and of making "grass" silage is rapidly increasing. On this page and on pages four, five and six we explain how to take advantage of these new developments and how the Gehl Cutter is adapted to the purpose. With the Gehl, you can do both these jobs, as well as fill your silo with corn—all with the same machine. The Gehl not only works three ways, but saves three ways—saves time, labor and money.



Less labor to put up cut hay.

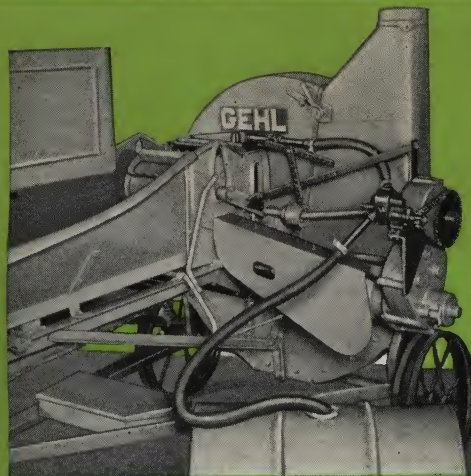
Cut hay is easier to feed from cart or basket.



Store more cut hay in same space.

Down the chute.





MAKING LEGUME OR GRASS SILAGE

The usual method of handling the hay crop even under the best of circumstances represents some loss. A certain amount of the value of hay is lost in the drying process. Carotene, one of the important vitamin-like elements, is almost entirely lost when hay is sun-dried and of course there is a substantial loss due to leaves dropping off, etc. Then when hay is dried out, a certain amount is wasted by the cattle, pulled under foot—coarse stems rejected, etc. If the weather is bad and the hay gets rain soaked while curing, the loss is even greater.

Grass silage almost eliminates these losses—there is no curing period. The grass goes into the silo without losing any of its food value—the only loss would be the slight amount due to fermentation and the part that acts as a “seal” at the top. There is practically no loss in feeding, also ensiling preserves a large part of the carotene and vitamins which would otherwise be lost.

Alfalfa is capable of producing more food value per acre than any grain crop and will out-yield any grain or silage crop in total proteins per acre. It is economical to grow—requires less cultivation—is beneficial to the land—and is one of the crops recommended as a means of arresting soil erosion. It is well worth while to plan to make the best possible use of it.

A convenient handling arrangement is to use a regular mower with windrow attachment. Follow this as soon as possible (within two hours) with a hay loader and pitch off into the silo filler, allowing the automatic pump to apply the proper amount of molasses.

Why a preservative is required:

Alfalfa and other legumes are relatively high in proteins, but do not contain enough sugar to set up the right kind of fermentation in the silo. If put up alone, they will ferment, but the process is usually unfavorable—it destroys the protein, carotene and other vitamins, and frequently imparts a disagreeable flavor to the silage. It is necessary, therefore, to control this fermentation process, and we describe below some of the most practical methods of doing so.

1st, Molasses: The addition of molasses quickly sets up the right kind of fermentation in the silo, and thus preserves the feed value of the plant. When using proper equipment like the Gehl Automatic Regulating Pump, it is easy to apply.

2nd, Phosphoric Acid: This is a newer development. It seems to result in excellent silage. There is a suspicion that the amount of acid added to the silage is a little too much for the best health of some cattle unless certain provisions are made in the ration, such as feeding of alfalfa hay or limestone. Phosphoric acid silage is not quite so palatable as molasses silage. We have so far been unable to find a pump (like the molasses pump) which will handle it without trouble due to corroding.

3rd, Corn Meal: Much experimenting has been done lately with corn meal as a preservative. One advantage is in the fact that corn meal does not necessarily represent a cash outlay. It does have the advantage of absorbing a part of the natural juice of the silage (which is usually excessive) and, of course, since little of its feed value is lost in the silo, it would be practical to use considerable more than the minimum amount. In fact, it has been suggested that if five hundred pounds of ground shelled corn were added for each ton of green alfalfa, the resulting silage would constitute approximately a balanced ration as to protein and carbohydrates. Corn meal has been found to be a very satisfactory preservative.

We publish a special bulletin on hay chopping and grass silage. It will be sent without charge on request.

Quantity of Preservative To Be Added Per Ton of Green Forage

(From Wisconsin Circular No. 299, May, 1940.
G. Bohstedt, W. H. Peterson and F. W. Duffee)

Crop	Molasses	Phosphoric Acid (75%)	Ground Shelled Corn*	Corn and Cob Meal
	Lbs.	Lbs.	Lbs.	Lbs.
LEGUMES				
Alfalfa, clover, etc.....	60	20	150	200
Soybeans.....	100	30	200	250
LEGUMES AND GRASSES MIXED				
Clover and timothy, etc.....	40	15	125	150
GRASSES AND CEREALS				
Timothy, canary grass, oats, etc.....	30	10	75	100

* Ground barley or other grain may be used instead of ground corn.

GEHL AUTOMATIC MOLASSES PUMP

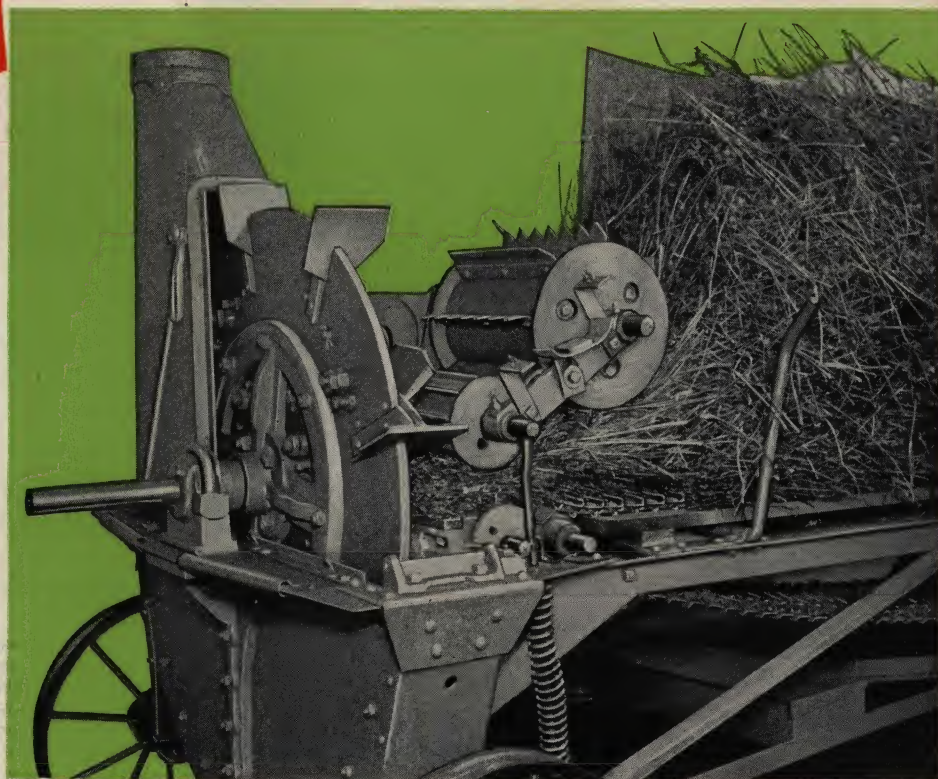
The GEHL Molasses Pump is driven by the same mechanism that drives the feeding rollers. When the rollers are in motion it pumps; when they stop, the pump stops also. The feed line is equipped with a regulating valve linked to the rollers in such a manner as to increase or decrease the flow of molasses in proportion as the rollers go up and down.

Once the pump has been set for the proper rate of flow, and the length of cut remains unchanged, the adjustment need not be altered; variations in feeding are compensated for by the link valve control. The molasses is spread across the width of the throat, carried through on the feed and thoroughly mixed in the blower. When no feed goes through, no molasses is fed. Thus an even application is assured and there is no possibility of gumming up the blower by feeding molasses when the machine is running empty. Simple instructions for setting the rate of flow are furnished with the pump.

POWERFUL HAY FEEDER MEANS BIG CAPACITY

Hay, being light and bulky, requires a large positive feeder. Note the arrangement used in the GEHL. The steel traveling feeder bars with their upturned edges carry the load forward to the throat. There the large feeder roller "climbs" the feed, the big extension blades grip it firmly, squeezing it between themselves and the upright edges of the traveling feeder bars, and force it on to the smaller compression rollers. These rollers pack it and pass it over the steel cutter bar where the knives shear it off. Positive in its action, its big appetite will keep two men busy pitching off. Its simple, sturdy construction means long life and freedom from repair troubles.

Under average conditions, the size C40 GEHL will handle a good sized load in from 10 to 15 minutes, or from 4 to 7 tons per hour.



HAY FEEDERS FOR PREVIOUS MODEL MACHINES

Recent models of GEHL Silo Fillers are fitted with rollers with blades drilled to receive the extension blades. If your cutter is equipped with a roller having these holes, you will need only the regular equipment consisting of extension blades and high sideboard with supports. If not, it will be necessary either to have the holes drilled by your local machinist, or obtain a new roller.

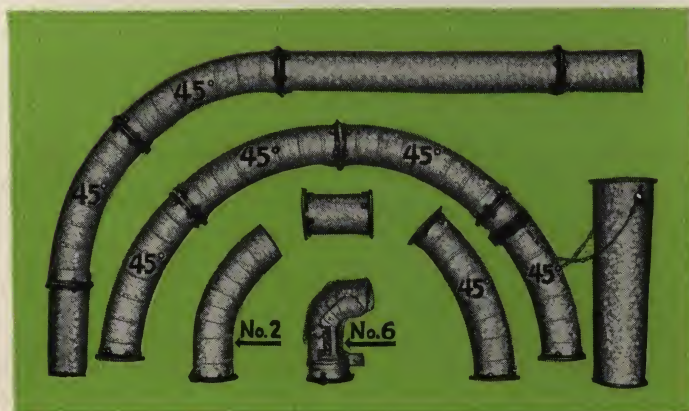
There are only two important requirements to be observed in chopping hay into the mow.

First, see that the floor joists are strong enough to carry the load. Second, see that the hay when cut into the mow is fully as dry as if put up whole.

A GEHL WILL BLOW HAY TO ANY PART OF MOW

The Gehl blower has ample capacity, if properly set up and the necessary speed maintained, so that cut hay can easily be blown 40 feet perpendicular and 100 feet horizontal. Special pipe arrangements are necessary if the hay is to be carried horizontally through pipe. The upright pipe should always be placed perpendicular—not at an angle—and horizontal pipe should have a drop of about eight inches to each ten feet. The illustration at left shows the special elbows, etc., for use in hay cutting.

For a right angle turn, from perpendicular to horizontal, two 45-degree elbows should be used, as illustrated. For a complete 180-degree assembly, four 45-degree elbows will be required. This will have a span of about six feet. If a greater span is required, straight pipe can be inserted between the second and third sections. The pipe comes in lengths of one, two, four, six and eight feet. Flexible elbow No. 2 can be used where only a slight bend is desired or as a deflector at the end of pipe. It has a flange on one end and is small enough to "funnel" at the other end. Flexible elbow No. 6 is similar to those used on threshers. Observe also that regular distributor sections can be attached to the 45-degree elbows if desired.



FOUR-KNIFE CUTTER AN ADVANTAGE

Extensive tests at the Wisconsin Station have demonstrated that the four-knife flywheel cutter is preferable to the three-knife. It gives greater capacity at slower speed, and slower speeds save power.

If the cutter is to be used for chopping dry hay, a *four-knife* type can be adjusted more readily to secure the recommended 2-inch cut. This is done by using the 1-inch cut gears and then removing 2 knives.

SAVES TIME, SPACE AND FEED

CUT HAY SAVES HALF THE STORAGE SPACE. Hay cut into the mow requires only about half the space of loose hay.

SAVES MEN. In storing loose hay you usually need a man in the mow, one to drive the horse that pulls the fork, and one or two men on the wagon. When you store cut hay with a Gehl, you need only the wagon crew. The Gehl blows cut hay to any part of the mow. You do away with the hot, disagreeable hay mow job and save one or two men.

EASIER TO FEED OUT. No pulling or tugging to get it out of the mow. There are enough longer pieces to bind the material together, making it easy to handle with a silage fork; it is much easier to ration out in definite quantities, and to mix with other feeds.

Taking the hay out vertically permits mixing of the various cuttings and kinds of hay and avoids the slump that sometimes occurs when changing from second to first-cutting alfalfa, etc.

IT REDUCES WASTE. Cattle eat it all—they cannot sort it out. The coarse parts go with the fine. Neither is there any tendency to pull it out of the racks and trample it under foot. Waste in ordinary hayfeeding averages around 20 to 25%. In chopped hay, waste is practically eliminated.

BETTER RESULTS IN FEEDING. For years feeders in many parts of the country have recognized the value of reducing the hay to some sort of "chop," and as long as twenty years ago, we were working on this point with western feeders. Some of the results they quote are hard to believe. The experience indicates *faster gains on less feed*.

IT STANDS EXPOSURE. On the Reed Bailly farm, Holt County, Missouri, chopped alfalfa has been stacked in the open for three years without loss. On a two-year-old stack, the hay was found green two inches inside the side of the stack. Spoilage on the sloping top was not more than four inches.



The GEHL Hay Chopper is as business-like as it looks. It takes the hay fast—requires no man at the feed table—and will blow the chopped hay over 100 feet horizontally if desired.



The high sideboard is a great convenience in feeding. It guides the hay down to the traveling feeder; prevents it from "bridging" across from one sideboard to the other. It can be attached to either right or left side.



"Boy! How It Goes Through!"

For years we have been thinking of buying a Silo Filler. This year we decided to buy one, so we naturally looked all the makes over and finally selected the GEHL.

We are more than pleased with its work, and think we made the best

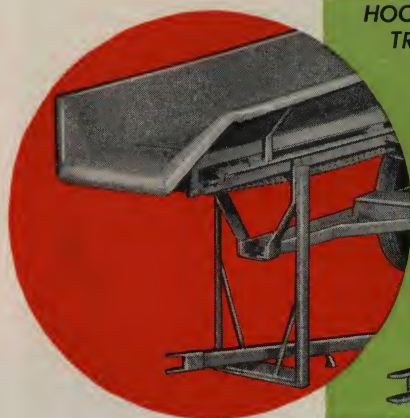
selection. One of my friends said, "If you only bought it big enough." Well, the B40 can take it—we found that out. Usually when we husk corn, we tie two binder cut bundles in one. When we decided to cut the corn stalks up with the filler, we thought that one man would have to feed it because the bundles were so big. Well,

we don't feed it, and boy, how it goes through!

In conclusion, I wish the Gehl Bros. Mfg. Co. my best luck in years to come with still more improvements, and let's make all the silo fillers a new GEHL.

Yours sincerely,
Otto Koch, Oconomowoc, Wis.

GEHL silo filler with trailer hitch and rubber tires



HOOK IT UP TO YOUR
TRACTOR OR CAR



For the user who does considerable custom work, this equipment makes the matter of transport far more simple. Without disassembling, the cutter can be quickly hooked behind a tractor, truck or car and towed to the next job. The rubber tires make moderate speed possible so long as the road is not too rough. (The cutter is not mounted on springs.)

The weight of the cutter is mostly on the axle, making it easy to pick up, move around and tow. When in operation, the feeder

rests on the substantial steel support shown in the illustration.

Only one minute is required to change. Only one bolt to remove. When the job is finished and the pipe taken down, simply hook the towing pole into place, couple up to the tractor, truck or car, bolt the support leg in place and go ahead.

Wheels are regular automobile type for 16" rubber tires, and equipped with roller bearings. Takes 16 x 5.50 or 16 x 6.00 tires. Used tires can be purchased locally at a considerable saving.

GEHL fills silos with 5 hp. electric motor

For the man who wants to do his own filling alone or with the help he regularly has on the farm, and who is connected with the "High Line," the electric motor method of filling is a genuine convenience. He drives up with the load—snaps on the motor—throws off his load (the cutter requires no man at the feed table), snaps off the motor and goes after the next load. No waste of power when the cutter is not running—no bother with starting an engine or tractor—and low power cost (our record of power cost on eight silos shows a variation of from \$1.92 to \$6.00 per silo actual cost). Add to this the advantages of getting the silo *actually full*, eliminating a big crew with "exchange work" and filling when the corn is right and you have a picture of what this practice means.

The use of the GEHL Cutter with a five hp. electric motor is no experiment. Many silos have been filled and users are continuing the practice year after year—an evidence of its satisfactory performance.

The five horsepower motor will successfully handle either the size A3, B with 2 or 3 knives, B29 with 3 knives, or B40 with 2 knives. The 3-knife machine should be run at 425 rpm, and the 2-knife machines at 450 rpm. These machines can be equipped with a platform for the motor and sprockets and chain for chain drive.



As to the electrical requirements, a 3 kv.-a. transformer is satisfactory if not further away from cutter than 400 feet with No. 6 wire. Five kv.-a. transformer is more satisfactory, especially if it is more than 500 feet from silo. In any event, the wire should be No. 4. In most cases, the 3 kv.-a. transformer is more economical for the farmer; therefore, it should be set as close to the silo as possible.



the GEHL knife grinder

Showing method of attaching knife grinder—equipped with knife rest which gives just the right bevel. The use of a knife grinder enables the operator to sharpen one set while the other

is in use. Frequent changing means a material saving in power and better quality silage. Furnished as an extra when ordered. It is so constructed that it can be bolted to a bench and used as a general-purpose grinder when not in use on the silo filler.

for trench silos

The Gehl deflector (elbow) is well suited for use in filling trench or pit silos. Regular equipment includes the deflector and hopper section as shown at right. The hopper section, with or without additional distributor sections can be used to carry the feed at most any angle. The hopper section can be removed to blow the feed at a sharper angle if desired.



heavy galvanized steel blower pipe



The blower pipe is made of heavy galvanized steel with steel flanges securely riveted. The bottom section telescopes (as shown in the "cut-away" illustration) allowing an adjustment of about 3½ feet—enabling the operator to set to exactly the required height. The hopper section attaches directly to the elbow. The illustration also shows the flexible ensilage distributor. Unlike other distributors these sections are suspended by a series of chains—so that when hooked together all of the weight is carried by a continuous chain. This eliminates the trouble of having rivets pull out, makes the distributor more flexible and enables the man in the silo to telescope the lower sections when desired.

"24 Years a User"

I have a C40 GEHL Cutter purchased this year that I am pulling with an Allis-Chalmers, W. C. tractor.

Before using the C40 I used a cylinder-type (Silberzahn) or Gehl Cutter. Used it every year the past 24 years, and is still in use in the vicinity. This is why I can see the many real features in present Gehl Silo Filler did not just happen, but grew from many years of experience. I consider the GEHL the most convenient, durable and reliable in operation with the lightest power requirement.

Yours very truly,
F. H. Swartz, Soldier, Kansas

"A Gehl User for Years"

Years ago I bought one of your steel frame Silberzahn lawn mower type ensilage cutters. It was quite satisfactory for that type cutter.

I used one of your C3 cutters four years filling about 40 silos in that time. It was entirely satisfactory, but last fall I traded it for a new C4 cutter.

I have used several different makes of cutters, both of the cylinder and flywheel type, and like the GEHL better than any other I have ever used. Would not hesitate to recommend them to anyone.

Very truly yours,
H. G. Eshelman
Sedgwick, Kansas

the 3-WAY GEHL is engineered

to do a better job

ABOUT POWER REQUIREMENTS

As to the size of power required, the figures shown in the table will give an approximate idea of requirements—the power specified being that generally used. However, due to its ability to elevate at low speeds, the Gehl Silo Filler can be handled at lower capacities and proportionately lower power requirements, reducing the speed of the filler through the use of a large pulley. Thus even though the power may be small, the advantage of easier feeding found in the larger machines (B and C sizes) can be had.

SPECIFICATIONS

Catalog Size	Width of Throat	Actual Throat Opening Between Rollers	Maximum Capacity Tons Per Hour		Horsepower Required
			Hay	Ensilage	
A3	11¾ in.	79 sq. in.	2	12	3 to 10
B40	13¾ in.	93 sq. in.	5	22	8 to 20
C40	15¾ in.	106 sq. in.	6	30	10 to 25

The capacity depends largely on power used. A fair average for ensilage would be from one to one and a quarter tons per hour per horsepower. Length of cut (all sizes) ¼", ⅜", ½", and ¾". Size A3 can be used with either 2 or 3 knives, as desired. B40 and C40 with either 2 or 4 knives. All sizes use 7" pipe.



12 POINTS OF SUPERIORITY

- 1** CLEAN CUTTING—Makes better ensilage.
- 2** UNBREAKABLE BOILER PLATE STEEL FLYWHEEL.
- 3** BIG CAPACITY AT LOW SPEED — Specially designed to give its rated capacities at very low speed.
- 4** ABSOLUTELY SELF-FEEDING — No man required at the feed table.
- 5** LIGHT POWER REQUIREMENTS — Proved to be lightest running in University and field tests.
- 6** BALL BEARING EQUIPPED—Highest grade industrial heavy duty ball bearings.
- 7** ALL GEARS ENCLOSED AND RUNNING IN OIL.
- 8** EASY TO CHANGE LENGTH OF CUT —Shifts like the gears in your car.
- 9** HANDY TO LUBRICATE—Equipped with ALEMITE ZERK Fittings and Gun.
- 10** SAFETY CONTROL LEVER—Accessible from either side of machine.
- 11** ALL STEEL FRAME—No possibility of breakage.
- 12** LOW SPEED BLOWER—No need for excessive speed on high silos.

GEHL BROS. MFG. CO., WEST BEND, WISCONSIN

Convenient Reverse Lever—operates from both sides—impossible to get hands in feed rollers.

Steel Blower Drum, inclosing boiler plate steel fly-wheel with steel fan blades, cannot crack, break or explode.

Special Notice: All gears inclosed and running in a bath of oil—strong, light running, durable—cannot get out of order.

Large Beater Roll in connection with steel slat feeder makes machine self feeding.

Big, wide, low Feed Table—convenient height above ground.

GEHL

SIZE C40

PUT LEVER IN NEUTRAL WHEN CHANGING LENGTH OF CUT

Lower half Blower Drum of heavy plate steel with adjustable rim.

No taking down or setting up. Machine always ready for the road or business.

Main Shaft and Jackshaft mounted in four highest-grade, heavy-duty ball bearings.

Alemite Zerk high pressure Lubricating System—convenient—positive.

Steel Feeder Rack with upturned edge slats—a powerful force feeder.

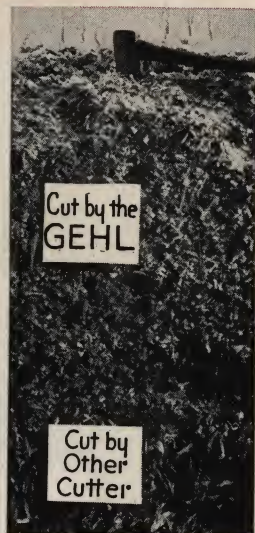
Pole can be slipped out of socket and laid out of way if desired.

Special Notice: Easy to change length of cut—simply slide rod over . . . a few seconds does it.

LOW SPEED MEANS LESS VIBRATION, LONGER LIFE, LOWER
POWER REQUIREMENTS, MORE SATISFACTORY PERFORMANCE

the clean cut of a GEHL

makes better ensilage



The first and most important of all requirements is *quality cutting*. That is a point you seldom hear mentioned, but every silo user knows its importance as it determines to a great degree just how good the silage will be. Once we had an opportunity to observe a practical demonstration of this point. A silo was partly filled by a machine of another make—then one of ours was set up to finish the job. Along in the winter the silage froze to the side walls. After the silage had been fed down a ways this frozen wall afforded an excellent comparison of the quality of cutting done by the two different machines—coarse and ragged below—fine and clean cut above. The user informed us that after feeding

out the silage cut by the Gehl, his cattle at first refused to eat the other. Sounds strong, but when you consider the facts it is not so strange. Silage that is not cut clean is fluffy and does not pack well—it does not exclude the air and if there are air pockets a mold develops which may not be bad enough to spoil the silage outright, but does lower its quality and gives it a different flavor.

WHY WE USE A SMOOTH LOWER ROLLER

You can see from the illustrations of the rollers just why the Gehl Cutter does such clean work. Notice that the compression spring tension is all directly on the upper roller, assuring that it will hold the feed tight—prevent it from being pulled through

by the knives. The Lower Roller is put in a lathe and turned down for smoothness—the Upper Roller has its ribs lengthwise. This, rather than the saw tooth type of design, is used because it holds the feed from slipping while being cut. A saw tooth type roller can allow certain of the stalks to be drawn through between the teeth. *The large upper roller and the upset edge feeder slats do the force feeding. The smaller upper roller and the smoother lower roller hold the feed tight while the knives cut it.* Notice also how close up the feed is held, the short distance from the rollers to the knives. Naturally, if the feed is to be clean cut, the closer and more firmly it is held the better.

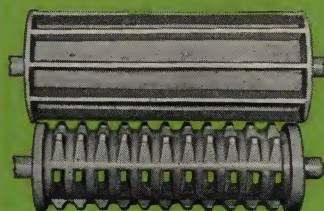
REVERSIBLE TOOL STEEL CUTTER BAR

The cutter bar is of special tool steel, heavy and hollow ground. It can be reversed so as to use each of the four edges, then it can be reground. The knives have a cutting edge of very hard steel inlaid into a softer steel blade, thus they hold their edge well, are tough and still are not hard to sharpen.

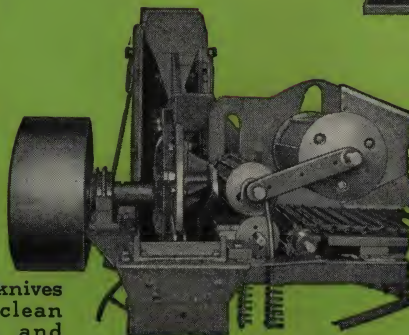
NO MAN REQUIRED AT THE FEED TABLE

Another important point is *convenience*—ease of feeding, handy to look after, etc. Gehl Cutters require no man at the feed table—they haven't since we added the large beater roller more than twenty years ago. A glance at the accompanying illustration, showing the wide open throat and the big beater roller, will show you why. The feeder rack is of steel with the rear edge of the slats turned up. This, working together with the beater roller, gathers in the feed and forces it through to the compression rollers. There are two safety levers—one on each side of the throat—with no ratchet to stick; give the lever a shove and the machine responds instantly.

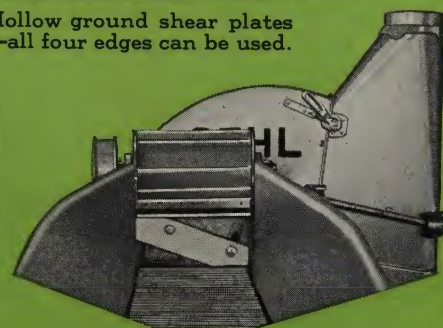
Gehl smooth lower roller grips feed tight, but saw tooth roller can not.



Large force feed rollers, closeto knives insure clean cutting and easy feeding.



Hollow ground shear plates—all four edges can be used.



Note the shear cut and large open throat.

GEAR SHIFTER TO CHANGE LENGTH OF CUT

Notice also the picture of the transmission case, one simple movement of the shifting bar changes the length of the cut—no need even to stop the machine. Regularly the machine cuts either $\frac{1}{4}$ " or $\frac{1}{2}$ ", but this can be changed if desired to $\frac{3}{8}$ " and $\frac{3}{4}$ " by changing sprockets on the outside of the transmission. The extra sprocket is regular equipment. The few points at which the cutter needs lubrication are equipped with fittings, and a pressure gun comes with the cutter.



Change length of cut by moving gear shift rod.



Close fitting fans insure efficient blower.

LIGHT POWER REQUIREMENT

There is a feeling of satisfaction and pride connected with the ownership of a machine that performs like a thoroughbred. You like to see your car step up the hills easily and quietly. You like to see your silo filler elevate into a high silo without faltering and roll in the stuff in great quantities with comparatively light power.

Power savings can only come from increased efficiency and elimination of waste. As an example—consider the blower.

Years ago, little was known about the blower on a silo filler. The general impression was that if a blower would not elevate, it required more speed. The fact is that extra speed, since it takes more power, frequently throws such an additional load on the engine that it has no power left to do the work, and as soon as a bundle is put through, the engine speed dies down.

We, therefore, set about to eliminate that waste of power by building a blower that would elevate at low speed. We tested fans and housings of every conceivable design. We found among other things that it was important as to just how many fans were used, how they were placed, their size and the angle at which they were set, how much clearance to allow at the ends of the blades, and what diameter drum was needed to get sufficient speed at the ends of the fans. The cut-away view at the right shows the blower construction of the Gehl Silo Filler

developed by our research. The easiest running—most efficient blower in use on any silo filler.

SAVES POWER THROUGH LOW SPEED

Extra speed, extra air blast wastes lots of power. For instance, in consulting the table of University Tests on page 16. observe that at a speed of 465 rpm the power required was .688 hp. per ton cut; at 576 rpm the power requirement was .899, or 30% higher and at 662 rpm the increase was 60%. *An increase of 30% in power required for each 100 rpm increase in speed.*

The feed should travel from the cutter bar quickly to the outer ends of the fans so as to discharge quickly and avoid carrying past the outlet and rubbing against the rim for a second time around. The feed should be thrown straight up the outlet pipe accompanied by a blast of air fast enough to remove any air resistance. Extra speed, extra air blast would be only a waste of power.

As the result of our experience, we have been able to build a blower that requires considerably less power on normal work. It is capable of filling high silos, over 75 feet, but it shows its greatest savings on silos of normal height. That is what it is built for.



"Best Equipment for the Work"

Several months ago, I purchased from you one Gehl Combination Silo Filler and Feed Cutter. I have used this machine for filling one silo with green alfalfa hay, also soy beans and cow peas cut green. I have used about seventy pounds of molasses to the ton of green alfalfa and soy beans, and

have found same to give excellent results in feeding cattle and sheep.

I have also filled four silos, each having a capacity of two hundred seventy-five tons, fifty feet high, using for power F-20 I.H.C. tractor.

This Gehl Combination Cutter and Silo Filler is giving perfect satisfac-

tion, and is the best equipment I have ever seen for the work intended.

I will be very pleased to have any of your friends call and see this machine in operation. I am sure that they will be, not only surprised, but greatly pleased with its operation.

Yours very truly,

Harry A. Tuer, Bardstown, Ky.

PROVED LIGHTEST RUNNING IN TEST

In a test at the University of Wisconsin, the Gehl Size C cut and elevated 35 feet at the rate of $19\frac{1}{4}$ tons per hour, running at only 465 rpm. Cutters made by eight different manufacturers were each subjected to seven tests but only two other makes and the Gehl completed them all. In the above test, the Gehl required only $13\frac{1}{4}$ hp. or .688 hp. per ton. The next lowest required 40% more power and the average was over 60% more.

There were six normal tests made—in all six of which the Gehl showed lowest power requirement per ton cut, and there was one test at 75 feet elevation on which the Gehl took second place. Perhaps the blower might have been built to elevate most economically at 75 feet elevation, but if it had, would not the extra capacity and power have been wasted on silos of ordinary height?

Notice also, in the cut-away view of the blower, that the lower rim sheets have slotted holes. These are provided so that the rim may be adjusted to take up any wear at the ends of the fans, thus the blower can be maintained at maximum efficiency, even after long service.

BOILER PLATE FAN WHEEL

The fan wheel is, of course, the real “business end” of the machine; it does the actual cutting and also the elevating. Completely equipped, it weighs several hundred pounds. Revolving at the rate of from 350 to 600 rpm, it represents considerable energy and consequently has to be stiff and well balanced.

We assemble the entire unit, trim off the ends of the blower fans after assembly to make sure they are exactly even, then

it is balanced up. The flywheel disc is made of boiler plate, strong and practically unbreakable, stiffened by a cast semi-steel hub flange. We held back from entering the flywheel cutter field until we got the idea of using this construction as we could not approve building a silo filler of this type unless it had an unbreakable disc. Of the many thousands we have built, not one has ever broken or “blown up.”

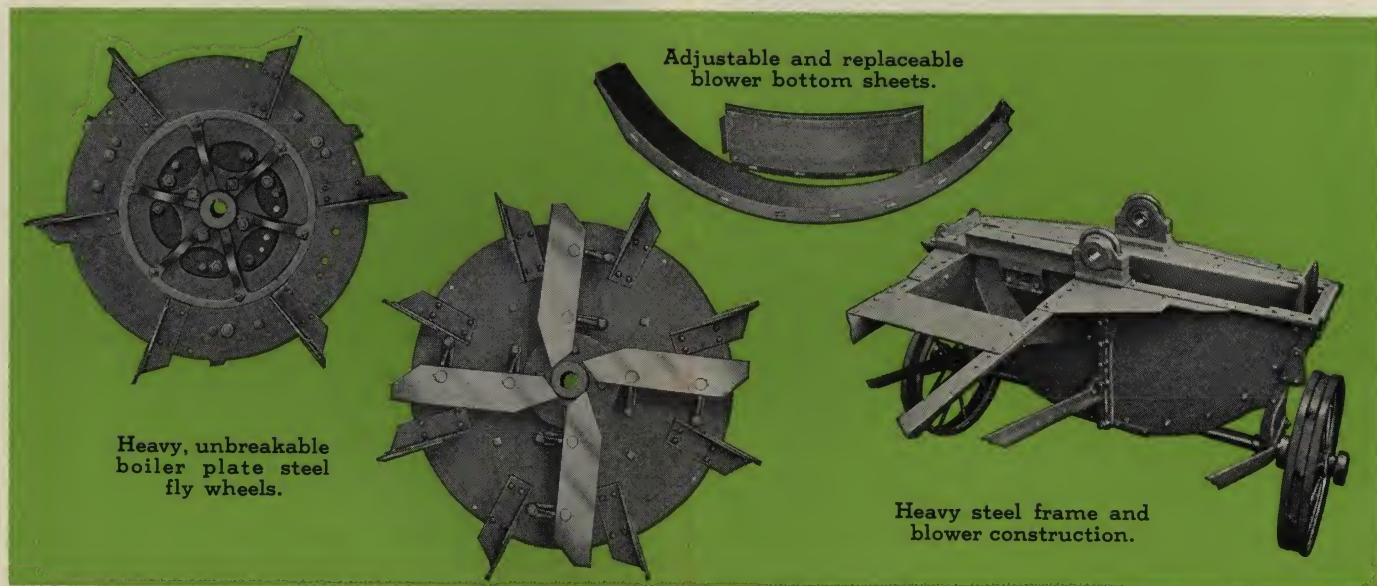
DURABLE AND DEPENDABLE

Now we will talk about the one remaining important requirement—*Durability*—freedom from repair trouble.

Below, we show a view of the frame construction. The frame is built of steel rather than cast as we consider it the more reliable of the two. Occasionally some foreign object, such as a piece of stone or iron, gets into the machine. If it gets between the knives and cutter bar, it is apt to give the machine quite a shock. Naturally, steel plate being practically unbreakable, is more reliable under such conditions than cast iron or cast steel would be. The broad plates forming the top of the frame are there to give it stiffness, to hold the frame in line against the strain of the belt.

BALL BEARING EQUIPPED

Each of the main bearings rests also on a cast support. Thus we accomplish the same result in frame construction as in the flywheel disc. Toughness and rigidity, something that neither plate steel or cast will accomplish alone. Both main bearings are heavy duty industrial type ball bearings. Not only are they



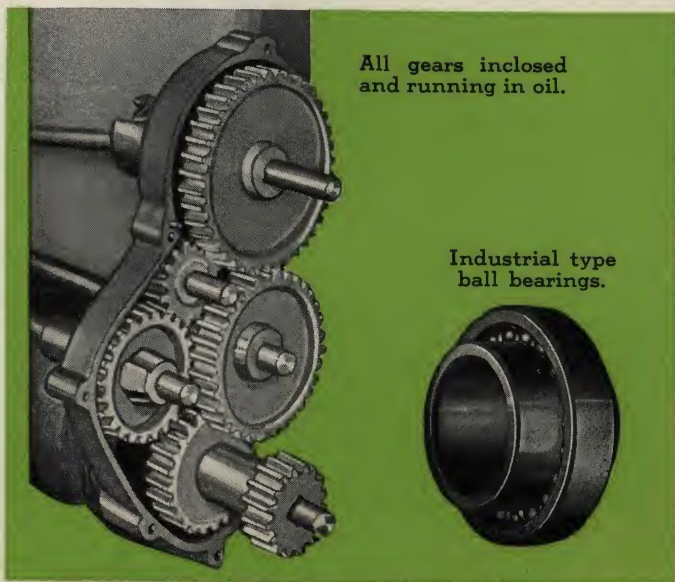
more durable and trouble free but they also eliminate end play in the shaft—making it possible to hold the knives in close adjustment to the cutter bar.

INCLOSED GEARS

For many years, we built only the cylinder or lawn mower type of silo filler and one of the biggest repair items was gears. There seemed no way of properly protecting them, but when we came out with the disc type cutter, we saw an opportunity for a big improvement by putting all the gears into a single case—making it oil and dirt tight so they would always be thoroughly lubricated with clean oil. Then as a further protective measure, we provided a break pin safety on the drive (at the inner end of the main shaft) so that in case of overload the pin would shear instead of endangering the gears. That was in 1919. This design has stood the test of time. Today, an order for a new gear for one of these inclosed transmissions is a rarity.

Each year from our records, we make up a list of parts furnished for repairs. This list is carefully checked over by our engineers as it will disclose any points that may need strengthening or corrections. Although we may not bring out an entirely new model each year, we are constantly at work to improve.

So that is the story of the Gehl Cutter; it tells you in a general way how we take care of the user's essential requirements.



All gears inclosed
and running in oil.

Industrial type
ball bearings.

"Takes It Faster Than Hay Fork"

The cutter works fine—can put hay in far faster than with hay fork. It would take it as fast as three men could pitch to cutter, cutting $\frac{1}{2}$ -inch cut. E. E. Wyatt, Tomah, Wis.

"Cuts Direct From the Thresher"

I have furnished the power to fill silos for many years, pulling cutters of three different makes, all standard types of machines. This fall was my first fall with a GEHL (C40), and it beats them all for fast cutting and easy pulling. Any good two-plow tractor will do a nice job of filling with your C40. Of course, a three-plow tractor will enable you to fill faster. We filled a 16 x 32 silo with 3 ft. pit in $8\frac{1}{2}$ hours with three-plow Twin City, K. T. A. and cutter set on $\frac{1}{2}$ " cut.

Filled 40 x 12 with 4 ft. pit ($\frac{1}{2}$ " cut) in 7 hours 15 minutes using Farmall 20, and was short of help or could have done better. Probably around $6\frac{1}{2}$ hours actual running time.

When we threshed soy beans, we placed blower pipe of thresher (hood turned down) over hopper of C40 GEHL and cut the threshed bean straw blowing same directly into barn. Used International 10-20 tractor on the C40. Made a wonderful combination and delivered a fine feed.

Used $\frac{1}{4}$ " cut. Also cut soy bean hay direct from field, and shock corn after ears had been removed by hand shucking. I advise $\frac{1}{4}$ " cut for all hay and corn stover cutting.

Ward F. Higgins, Plymouth, Illinois

"Makes the Best Sweet Clover Silage with a GEHL"

Thought you might be interested in hearing of the fine success we had with our three silo fillers we use on our four farms in McHenry County, Illinois.

Our eight silos have a total height of 354 feet. In 1938 they were filled with corn silage and sweet clover silage.

The outstanding point of interest in our silage storage work of 1938 was the compliment from Professor W. B. Nevens of the University of Illinois; referring to our sweet clover and molasses silage. He made an analysis of our silage, and said, "This is some of the best sweet clover silage I have ever seen. It has a very nice yellowish green color, seems to be preserved in excellent manner, and has a characteristic sweet clover odor. The dry matter content is approximately 26 per cent."

We felt quite pleased with our work, and wish to share our pride with you for the excellent machines you make.

Edward M. Miller, Chicago, Ill.

P. S.—There are 67 Holsteins at 1 farm—60 Brown Swiss at another, and 126 White Face Herefords and 500 hogs at the other.

what users

say...

"The Easiest Pulling Cutter"

Just a line to tell you how much I like my B40 GEHL Silo Filler purchased last fall. The GEHL is the easiest pulling cutter I have ever seen, and it practically feeds itself on any kind of corn and does excellent cutting under all conditions.

GEHL Silo Fillers surely are the going machine around here the last few years, as most farmers here have two plow tractors and they must have cutters that pull easy like yours does. I pull my GEHL with a Farmall so it pulls it easily and keeps eight teams on the jump to deliver the corn fast enough.

Yours very truly,
John L. Wilhelm, Jackson, Minnesota

"You Need the BEST for Custom Work"

In regard to your letter, I am very happy and pleased since I purchased a C40 Silo Filler and Hay Chopper from you last August. It is indeed a pleasure to know that the Gehl Bros. Mfg. Company are not through with their buyers the moment the sale is made, but they follow up their machine and replace defective parts, if any are found, and give helpful suggestions.

I pull my C40 with a John Deere Model A Tractor with ease and satisfaction. I fill my own silo and chop my hay. I also do a lot of custom work. When doing custom work, you must own the best machine made to be on the job and get new customers all the time. It takes a C40 for this. My customers say they never saw such a machine do such fast work and cut so thoroughly as your C40. Before buying your C40 Silo Filler and Hay Chopper, I had a 16" machine. There is no comparison between the two machines when it comes to efficiency and capacity. Furthermore, the C40 is the fastest and easiest running cutter I ever tried to pull with a tractor.

Yours truly,
Wilbert Stalter, Chenoa, Ill.

"It Don't Blow Up"

In regard to your cutter, will say we have four cutters in all the last 20 years, but your cutter has them all beat. We had our men run two forks in the cutter, cut the forks completely up. The first time it broke two knives, and the last time four knives, but never broke any other parts of the cutter, and believe me, it takes some cutter to stand that.

Yours very truly,
A. C. Spooner, Elk Mound, Wis., R 5

"A-1 Condition After 100 Silos"

I think the Gehl Bros. flywheel cut silo filler is the best made regardless of price or make.

In 1929 I bought a B4 size and I did custom filling for 5 years with it, filling over a hundred silos in those 5 years. Then I sold it to a neighbor. It was in A-1 condition and still is.

This fall I bought another filler size B40, for I started farming again and was going to do custom filling. I looked at several other makes of fillers and watched them in operation, but there was not a single machine that could compare with the GEHL in ease of operating or trouble-free construction.

Yours sincerely,
John Bulgrin, Milladore, Wis.

"Fills High Silos With Light Power"

I bought one of your B40 Silo Fillers last fall. Since then I have filled 34 silos and never had any trouble. I use a 10-20 McCormick Deering tractor, and have ample power for the highest silo.

Yours sincerely,
R. A. Struchers, Turners, Ontario

"They All Complimented the Gehl on Nice Work"

When I bought my new GEHL Silo Filler size B40, I was a little bit afraid that it was not large enough, but I had not used it more than half a day before I knew it was as large as I needed it. I had 7 teams and a short haul. But they were on the go all the time. I had two men on the loads throwing off. One of the men made the remark, "This little filler takes it just as fast as most 16-inch fillers do."

I filled ten silos and they all complimented the GEHL on the nice work it did on cutting up the corn. So I can't say anything else but that I am more than pleased with the way the GEHL performed. I run it with a 10-20 tractor.

Yours very truly,
Irving Haugesteun, Chetek, Wis.

"Will Take All 2 Men Can Throw In"

We have one of your GEHL B40 Cutters. We think it is all you claim. We used it with an 18-36 Huber tractor. It will take all 2 men can throw in. Also used a Fordson tractor. A Fordson works good and will handle it fine. It is an easy cutter to handle for man or tractor.

Yours very truly,
Harry Courrin, Walters, Minn.

"It Sure Can Cut Corn"

I got one No. 40 Gehl Silo Filler, and it sure can cut corn. I fill a silo 10 x 30 in one hour and forty-five minutes.

Yours truly,
Roland Johnson, Pepin, Wis.

"You Could Roll the Corn Right In"

My father-in-law gave me the very old "Nick" for buying one of your C40 cutters—said too big. We haven't got power to run it, but we tried it out and filled our first silo 12 x 40 in five hours, and did it with all ease. Then he said, "I give up." We use a Oil Pull 16-30. You could roll the corn right in.

One of our friends came over and said he would like to try it on his silo with his 20 hp. Allis-Chalmers. So I took the cutter and filled his 16 x 60 silo in 20 hours and blew it the full 60 feet like a top.

So we are more than pleased with our cutter, and can recommend it as the best of cutters, as we have used quite a few different ones.

No one can go wrong in buying a GEHL Silo Filler.

Yours truly,
Ed Brown, Oxford, Wisconsin

"From South Africa"

Prior to date I have refrained from writing you on the subject of the Gehl A3 cutter and blower purchased from you in February last, owing to the fact that I wished to test it not only with green fodder for silage, but also dry stalks, millet, teff and cow peahay, etc.; this week I made the final tests and cut up three stacks of dry fodder, 1 maize stalks, 1 millet, 1 cow peahay in a few hours.

So am now in a position to truthfully state that the Gehl A3 driven by a 7½ hp. Morse engine will do everything, if not more, than your illustrated pamphlet describes.

This week, in a few hours, the machine cut up sufficient of the above mentioned hay to last 33 head cows and stall oxen for over a month. Previously, it used to take at least 3 boys daily during the winter months to keep this number going. I am,

Yours faithfully,
C. Drummond, Muirend,
Newcastle, Natal, South Africa



"No Man Needed at the Feeder"

When I got ready to fill, I got my crew to set her up, and I started. I started to feed the same as before. After the first load, I saw I had nothing to do as the filler was feeding itself, so I got on the load too and helped throw in. I wanted to see what it would do, so we put the corn bundles in two deep of big corn, and it went through fine with less power than it took before on the 16-inch and we put through more corn.

I am well satisfied with the cutter because it is better than I expected, and another thing, after you get to the top of the silo with the last pipe on—before we had to get an extra man and a couple of forks and pitch it around by hand. With this, you don't need any forks—one man can top the silo out to the peak with that hood, take that off and hold it with your hands so the silage shoots through it. You can turn it any way you want to and shoot the silage all around on the walls and clear up in the peak.

Yours very truly,
F. W. Westergren, Bertha, Minn.

"Long Service—No Repairs"

In regard to the GEHL Silo Filler.

I believe it is the best on the market. This is a C40 machine. We used one eight years, filling eight silos each year. The cutter was in good shape when we traded for the new one this fall. We did not spend one cent for repairs.

Very truly yours,
Don Flahrer, Charles City, Iowa

"Likes the Noise Left Out"

We bought a B40 Gehl silo filler last year, and will say it is the last word in efficiency and performance.

It is a pleasure to operate a machine like the Gehl, as the manufacturer has left out all that noise. You really can work around this machine and hear yourself think.

We sure have a satisfied company.

Yours very truly,
H. W. Geiger, Clarksville, Mich.

the thoroughbred is known by his record

On another page in this booklet we show why the Gehl Cutter runs so light, has such a big capacity—cuts so clean—is so easy to operate—durable and safe. Here we present positive proof of our statements—proof that will enable you to know that if you buy a Gehl Cutter you are getting absolutely the **LIGHTEST RUNNING CUTTER** you can buy.

Each year, for a number of years, the University of Wisconsin conducted tests of various makes of silo fillers to determine

power requirements—capacity—proper speeds, etc. The Gehl has always shown up well in these tests. We show here figures taken from the official report on the tests during the fall of 1924 as made by the Gehl Size C Disc Type Cutter, cutting .558 inch.

The report reads: "*The comparative efficiency is expressed in horsepower hours per ton. The lower this figure is, the lighter running is the machine.*" Taking this as a basis, the Gehl Cutter would be entitled to the grading shown at the right.

Lowest Power Requirements in Six Out of Seven Tests

	Speed RPM	Tons Cut Per Hour	Horsepower Per Ton	
Test No. 1 Slow Speed and capacity equal to Test No. 3	475	21.70	.752	First Place
Test No. 2 Slow Speed and 75% of maximum for that speed	465	19.26	.688	First Place
Test No. 3 Intermediate Speed and capacity about 75% of maximum for that speed	576	22.10	.899	First Place
Test No. 4 High Speed and capacity equal to No. 3	662	22.80	1.098	First Place
Test No. 5 High Speed and 75% of maximum capacity for that speed	656	25.71	1.037	First Place
Test No. 6 Maximum Capacity at Intermediate Speed	560	30.06	.867	First Place
Test No. 7 Minimum Speed to elevate 75 feet at a capacity of about 75% of maximum for that speed	542	17.15	1.031	Second Place

Take particular notice that in the tests which may be taken as fairly representative of actual farm conditions (tests Nos. 2, 3 and 6) the cutter required less than one

horsepower per ton cut and developed capacity large enough for all practical conditions. Height of silos in first six tests, 35 feet. Note the **LOW SPEED**.

The "GEHL" Showed Lowest Average Power Requirement of Any Cutter in the Test

There were nine cutters tested; each cutter was to be subjected to all seven of the tests as outlined, but only four completed all seven; of these four, two were Gehls. The Gehl Size C showed the lowest power requirement in six out of seven tests.

In 1925 a test was run again on a number of cutters.

The new report shows that so far no other machine has shown a power requirement as low as our low figures.

The figures obtained are useful, not only because they form a basis of comparison, but because they give a dependable idea of what can reasonably be expected of the cutters in actual service. That is what the user is interested in.

GEHL BROS. MFG. CO., WEST BEND, WISCONSIN

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SILOS EASILY**

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